UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,391	03/31/2000	Mark Robins	SIEB-045/00US	2190

25096 7590 01/22/2004

PERKINS COIE LLP
PATENT-SEA
P.O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER	
REAGAN, JAMES A	
ART UNIT	**PAPER NUMBER**
3621	

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 26

Application Number: 09/540,391
Filing Date: March 31, 2000
Appellant(s): ROBINS, MARK

Steven D. Lawrenz
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08 July 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims do not stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

• US 6,161,113A	12-2000	Mora et al
• US 6,347,258B1	02-2002	Hsu et al
• US 5,036,472	07-1991	Buckley et al.

- Kronenke, David A., Database Processing: Fundementals, Design, & Implementation ; 2000, 1998, 1995, 1992, 1988. Prentice-Hall, Inc. Seventh Edition, pp. 17, 36-38, 116, 533-534.
- "User's Guide for Microsoft Project." 1995; Microsoft Corporation. pp 3-7, 88, 90, 91, 93, 95, 117, 141, 144. Document Number PJ62476-0895
- Pyron et al. "Using Microsoft Project 4 for Windows." 1994 Que corp. Chapter 4, pages 95-130.
- Eisener, Howard. "Essentials of Project and Systems Engineering Management." 1997John Wiley and Sons, Inc; NY. Cpater 7, section 3. pages 153-176.
- Florida Technology Development Corporation - Integrated Product and Process Design Print Quality Analyzer. MicroView Systems. April 22, 1999.

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 15, 16, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over "User's Guide for Microsoft Project" (1995), herein referred to as "Microsoft Project", in view of "Using Microsoft Project 4" (1994), herein referred to as "Project 4" and also in view of Hsu et al. (US 6,347,258), Buckley et al. (US 5036472 A), and to Florida Technology Development Corporation - Integrated Product and Process Design Print Quality Analyzer: MicroView Systems.

Claim 15:

With regard to the limitation of:

- *entering a description of each of said product features, wherein said description comprises an instantiation of a feature list graphical user interface,* Microsoft Project discloses descriptions of the tasks or features instantiated into the task list (Chapter 7, "How You Can Customize a View or Report" page 88).
- *defining a plurality of tasks, wherein each of said tasks is associated with one of said product features, the plurality of tasks being grouped into task types,* Microsoft Project discloses tasks and task types, grouped according to specific features (Chapter 7, "Printing a Custom Bar Chart Schedule (Gantt Chart)", page 91). Tasks (or features) are grouped into product development phases.

- *entering a task progress development as an instantiation of a task-type graphical user interface, wherein the task-type graphical user interface is selected from a plurality of task-type graphical user interfaces, each corresponding to one of the task types,* Microsoft Project discloses a graphical user interface (Chapter 7, "Printing a Custom Bar Chart Schedule (Gantt Chart)", page 91). Microsoft project also discloses task development progress (Chapter 7, "Printing a Custom Bar Chart Schedule (Gantt Chart)", page 91). Options between views (GUI's) are shown as Gantt chart (page 91), calendar (page 93), PERT Chart (page 95).
- *tracking a status of each product feature via the instantiated task-type graphical user interfaces,* Microsoft Project discloses task tracking and status (Chapter 7, "Printing a Custom Bar Chart Schedule (Gantt Chart)", page 91).

Microsoft Project does not specifically disclose *describing the product in terms of a plurality of product features.* However, it would have been obvious to modify Microsoft Project by replacing the ***Summary Tasks*** as shown in the Gantt chart with product features, and listing the tasks required to fulfill or complete the product features. Chapter 4 of Project 4 (pages 95-130) discloses detailed instruction regarding instantiating the project planner with tasks. On page 97, a typical Gantt chart is shown (Figure 4.1). Summary tasks are shown in bold and subordinate tasks are shown indented under their parent summary task (see

page 188 for a full description). It would be obvious to modify Microsoft Project and replace a Summary Task with a product feature and then delineate associated product tasks beneath the Summary task. For example, consider a build to order computer sales operation. A customer may desire a particular processor, hard drive, RAM size, video card, etc. Summary features and associated tasks may appear on the Gantt chart as follows:

1600 MHz Pentium processor	**.3h**
Remove existing processor	.1h
Install 1600 MHz Pentium processor	.1h
Send replaced processor to parts supply	.1h
Hard Drive – 20 Gbytes	**.5h**
Remove existing drive	.2h
Insert 20 Gbyte hard drive	.2h
Plug in cables	.1h
Ram – 256 Mbytes	**.3h**
Remove existing memory	.1h
Insert 256 Mbyte stick	.1h
Send replaced stick to parts supply	.1h

By using this outlining format, the features of the project can be instantiated into the Gantt chart. Since Microsoft Project places no restriction on the content of the Summary Task fields, any text entry may be placed into the field (Project 4, page 98, "Entering Tasks in the Gantt Chart). As demonstrated,

it would have been obvious to one of ordinary skill in the art at the time of the invention while using Microsoft Project to replace the ***Summary Tasks*** as shown in the Gantt chart with product features, and listing the tasks required to fulfill or complete the product features below the product features. Outlining the project plan produces a Work Breakdown Structure (WBS) that not only lists the tasks necessary to implement a product feature, but also shows which features are incorporated into each product plan. This hierarchical structure identifies where each task fits into the project plan as a whole (see pages 96-97).

In addition, Microsoft Project does not specifically disclose *linking each of the plurality of tasks with one of the plurality of product features.* However, in light of the modification disclosed above, the tasks are inherently linked to the product feature as a hierarchical structure consisting of a product feature and its subordinate task.

The Examiner has shown that describing a product according to its features, and using Microsoft project to do so would have been obvious to one of ordinary skill in the art at the time of the invention, and has provided support for this line of rejection as follows:

(1) US 6347258 B1 to Hsu et al. Hsu discloses a data structure relating to a product and a method of preparing the same to set up the data structure. The data structure is stored in the memory of a computer comprising a technology table, a product table, and a tool table (or a mask table). The technology table comprises a technology ID and a process layer data for

recording the information of each process layer, wherein the process layer data comprises a plurality of layer codes. Each layer code corresponds to a process layer. In addition, the product table comprises a product ID and a product link table for providing a link to the technology table. The tool table comprises at least one tool ID for each process layer and a tool link table for providing a link to the product table. The method of preparing the data structure of a product according to the present invention comprises, in sequence, storing the technology table, storing the product table, creating the tool ID for each process layer to establish a tool table, and storing said tool table in the memory of a computer (abstract). Furthermore, in column 4, lines 4-11, Hsu discloses the inherent and obvious link between a product and its features as maintained in a table, along with descriptors. This shows clearly that it is not novel to link a product, its features, and descriptions together in a computer environment.

(2) US 5036472 A to Buckley et al. Buckley discloses a machine for vending greeting cards or other personalized or customized products includes audio and video presentations of available products and options available to a customer, provisions for payment and apparatus for automatic delivery of products. Base products such as preprinted forms are stored for selective transfer by a robot device to modifying apparatus such as a printer, modified products being delivered to a delivery receptacle, all operations being under computer control and being changeable as desired

for adding or substituting new forms of products (abstract). In column 2, lines 19-26, Buckley states, "Preferably, available products and their desirable attributes and features are identified both audibly and visually and the computer is programmed to control presentation of a sequence of images and associated sound. In accordance with an important feature, it controls a general presentation of a series of descriptions of available products and their features with instructions as to initiating use of the machine. When a customer initiates use of the machine, the computer then controls presentations of specific instructions to the customer to make it possible to make selections easily, quickly and accurately. After a customer's selections are effected, the computer again controls the general presentation and repeats it until another customer's use is initiated. Thus the audible and visual capabilities of the machine are used to maximum advantage." This again shows clearly that it is not novel to link a product, its features, and descriptions together in a computer environment.

(3) Florida Technology Development Corporation - Integrated Product and Process Design Print Quality Analyzer. MicroView Systems. This reference is from the MicroView design team from the University of Florida's Electrical Engineering program. Sponsored by QMS Inc., the team was tasked with developing a Print Quality Analyzer for QMS's line of high-quality printers. Begun in fall 1998 and finished in spring 1999,

MicroView group designed, documented and built a print quality analyzer. For purposes of project planning, the team used Microsoft Project, as shown in the enclosure. Specifically, MicroView used Project not only to build the "House of Quality" metric standardization table, but also to develop a concept-screening matrix. Furthermore, MicroView used Microsoft Project to determine a planned timeline for developing and building the system, as shown in the enclosure. Appendix G specifically shows using Microsoft Project to enumerate the milestones of the project, outline the various testing features, and associates specific tasks and features with the product, thereby linking the tasks, features, descriptions to the product and to each other.

Claim 16:

With regard to the limitation of:

- *linking all of the graphical user interfaces to one another via the features,* Microsoft Project discloses linking various Gantt charts from the project (Chapter 7, "Printing a Custom Bar Chart Schedule (Gantt Chart)", page 91). Selection (displaying) of the view is disclosed on page 117, "Displaying a View."

Claim 26:

With regard to the limitations of:

- *describing the product in terms of desired features of the product;*

- *defining, for each feature, a plurality of tasks necessary to implement the feature;*
- *linking each task with its corresponding feature; and*
- *entering data associated with a selected one of the plurality of tasks into a graphical user interface associated with the selected task,* see the rejection of claim 15 above.

Claim 27:

With regard to the limitation of:

- *selecting a graphical user interface displaying data associated with a task based on the feature associated with the task,* see the rejection of claim 15 above.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Project/Project 4, further in view of Eisener, "The Essentials of Project and Systems Engineering Management" (1997).

Claim 23:

With regard to the limitation of:

- *a product feature list user interface by which a user enters desired features of the product to be released,* see the rejection of claim 15 above.
- *an engineer task list user interface by which the user enters and tracks information related to tasks being completed to implement*

the product features entered in the feature list user interface, wherein the tasks correspond to one of the product features, see the rejection of claim 15 above.

- *a quality assurance user interface by which the user manages and tracks both quality assurance test plans and tests that are executed against the test plans and designed to ensure the functionality of the desired product features,* see the rejection of claim 15 above.
- *a technical documents list user interface by which the user enters and tracks information related to documents being developed to describe the desired product features,* see the rejection of claim 15 above.
- *wherein all parameters entered by the user into the engineer task list user interface, the quality assurance user interface and the technical documents list user interface are each defined in terms of a particular one of the product features entered into the feature list user interface,* see the rejection of claim 15 above.

As shown above, the combination of Microsoft Project/Project 4 discloses a graphical user interface, product features and tasks associated with said features, and tracking information. The combination of Microsoft Project/Project 4 also shows an engineering task list as shown above. The combination of Microsoft Project/Project 4 does not specifically disclose that the GUI task list/product feature list of the Gantt chart format could be modified to track quality

assurance tasks, testing and evaluation tasks, or technical documentation tasks, and that the T&E, QA and documents tracking lists are associated with a particular product feature. However, Eisener, in "The Thirty elements of Systems Engineering" discloses Test and Evaluation, Quality Assurance, and Documentation (sections 703.19, 7.3.20, and 7.3.25). It would have been obvious to one of ordinary skill in the art at the time of the invention to track the old and well-known systems engineering elements of T&E, QA and Documentation in the Gantt chart as disclosed by Microsoft Project/Project 4. As shown above, any textural form can be listed as a product task, and linked with any product feature. Including Quality Assurance measures, technical documents and associated testing procedures as part of the project is an obvious use of the project management software. By incorporating T&E, QA and Technical Documentation into the schedule all facets of the project are tracked to ensure on-time completion.

Claim 24:

With regard to the limitation of:

- *all parameters entered by the user into the engineer task list user interface, the quality assurance user interface and the technical documents list user interface are each linked to a particular one of the product features entered into the feature list user interface,* see the rejection of claim 23 above.

Claims 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Project/Project 4, further in view of Kroenke, "Database Processing: Fundamentals, Design, and Implementation" (1988), herein referred to as "Kroenke."

Claim 17:

With regard to the limitations of:

- *storing the feature descriptions, task definitions and task progress developments in a relational database,* and
- *linking each task definition and related task progress developments to their corresponding one of the plurality of product features through the use of relational database keys.*

The combination of Microsoft Project/Project 4 discloses saving files in a database format (Microsoft Project, Chapter 11, Importing and Exporting Files", page 141). Microsoft Project may be used with Microsoft Access, a relational database application (Microsoft Project, Chapter 11, Importing and Exporting Files", page 144). The combination of Microsoft Project/Project 4 does not specifically disclose linking the features in a relational database with the use of database keys. Kroenke, however, on pages 116 and 123 does disclose the use of keys and primary keys. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the project management tool of Microsoft Project/Project 4 with the relational database tool of utilizing primary keys as disclosed by Kroenke because primary keys uniquely identify features

and tasks associated with a database which allow a user to quickly and efficiently search through large amounts of data to such as product definitions, milestones and schedules. As shown in the rejection of claim 15 above, a plurality of product features may be instantiated into the relational database/project plan. The tasks are inherently linked to the product feature as a hierarchical structure consisting of a product feature and its subordinate task.

Claim 28:

The combination of Microsoft Project/Project 4 discloses a project management tool that helps plan, manage, and communicate information about projects as shown in the rejection of Claim 26 above. The combination of Microsoft Project/Project 4 also discloses database properties, but does not specifically disclose *storing the features, tasks and data in a relational database* and *linking the tasks and their associated data with their associated features by assigning a key to each feature, task and datum.* Kroenke, however, on pages 116 and 123 does disclose the use of keys and primary keys. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the project management tool of Microsoft Project/Project 4 with the relational database tool of utilizing linking keys and primary keys as disclosed by Kroenke because keys uniquely identify features and tasks associated with a database which allow a user to quickly and efficiently search through large amounts of data to such as product definitions, milestones and schedules.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Project/Project 4/Eisener, further in view of Kroenke.

Claim 25:

Microsoft Project/Project 4/Eisener disclose the project planning software and project management techniques as shown in the rejection of Claim 23 above. Microsoft Project/Project 4/Eisener do not disclose *a relational database operable to store data entered into the interfaces, and further operable to filter the data based on the product features.* Kroenke, however, on pages 17 and 18 does disclose relational database model. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the project management tool of Microsoft Project/Project 4/Eisener with Kroenke's relational database model because relational databases minimize duplicate data and processing errors as well as provide a powerful filtering tool capable of retrieving data quickly and accurately. In addition, it is old and well known in the database arts to search and filter instantiations of the database to retrieve desired information.

(11) Response to Argument

Appellant, on page 5 of the appeal brief, concedes that "...Microsoft project is flexible enough to permit a user to enter product features in place of summary tasks. Accordingly, appellant concurs that it was possible to modify the two references describing Microsoft project as proposed by the Examiner." It is therefore the firm position of the Examiner that Microsoft Project can be utilized

with the project management techniques of Eisener to render the current application unpatentable.

Appellant argues that the Examiner has not identified any source of motivation for combining the references. In addition, Appellant argues that the Examiner improperly cited new references used as supporting evidence while maintaining the same rejection. The Examiner respectfully points to MPEP 1208.01:

> There is no new ground of rejection when the basic thrust of the rejection remains the same such that an appellant has been given a fair opportunity to react to the rejection. See In re Kronig, 539 F.2d 1300, 1302-03, 190 USPQ 425, 426-27 (CCPA 1976). Where the statutory basis for the rejection remains the same, and the evidence relied upon in support of the rejection remains the same, a change in the discussion of, or rationale in support of, the rejection does not necessarily constitute a new ground of rejection. Id. At 1303, 190 USPQ at 427 (reliance upon fewer references in affirming a rejection under 35 U.S.C. 103 does not constitute a new ground of rejection).

The introductions of Hsu et al (US 6,347,258 B1), Buckley et al. (US 5,036,472), and Florida Technology Development Corporation - Integrated Product and Process Design Print Quality Analyzer, are utilized for providing support for the line of rejection. To this end, the Examiner points out that the concepts of project and product management and development are considered to be common knowledge, and therefore combing the tools of product and project management are also common within the design arts, as supported by the three references above. The Examiner has shown that describing a product according

to its features, and using Microsoft Project to do so, would have been obvious to one of ordinary skill in the art at the time of the invention, since project management and development skills and tools are employed in a college-level environment.

Appellant asserts that the Examiner has shown no connection between product features and tasks. The Examiner disagrees and points to the Florida Technology Development Corporation reference, wherein the MicroView team used Microsoft Project not only to build the "House of Quality" metric standardization table, but also to develop a concept-screening matrix. The Gantt chart is the cornerstone of the Microsoft Project software package, and by using the Drawing Toolbar, various grids and charts can be constructed within and alongside the Gantt chart. Furthermore, MicroView used Microsoft Project to determine a planned timeline for developing and building the system, as shown in the enclosure. Appendix G specifically shows using Microsoft Project to enumerate the milestones of the project, outline the various testing features, and associates specific tasks and features with the product, thereby linking the tasks, features, descriptions to the product and to each other. Appellant has conceded above Microsoft Project is flexible enough to permit a user to enter product features in place of summary tasks. Since Microsoft Project places no restriction on the content of the Summary Task fields, any text entry may be placed into the field (Project 4, page 98, "Entering Tasks in the Gantt Chart). As demonstrated, it would have been obvious to one of ordinary skill in the art at the time of the

invention to make use of Microsoft Project by replacing the ***Summary Tasks*** as shown in the Gantt chart with product features, and listing the tasks required to fulfill or complete the product features below the product features. Outlining the project plan produces a Work Breakdown Structure (WBS) that not only lists the tasks necessary to implement a product feature, but also shows which features are incorporated into each product plan. This hierarchical structure identifies where each task fits into the project plan as a whole (see pages 96-97).

Appellant asserts that the Examiner has shown no link between product features and product related tasks. The Examiner disagrees and points to the Product features selected from the House of Quality gird, which are transferred to the Gantt chart and a timeline built around the selections. As shown on the provided Gantt chart, product features and tasks are then linked. Any person of ordinary skill in the art i.e. a rudimentary skill in using Microsoft Project, would quickly see the linkage between tasks and features of a product during a project phase. The links are shown grammatically as text entered into the left-side columns, and graphically as timeline bars supplied by Microsoft project software. Appellant has conceded above Microsoft project is flexible enough to permit a user to enter product features in place of summary tasks. Since Microsoft Project places no restriction on the content of the Summary Task fields, any text entry may be placed into the field (Project 4, page 98, "Entering Tasks in the Gantt Chart). As demonstrated, it would have been obvious to one of ordinary skill in the art at the time of the invention to make use of Microsoft Project by

replacing the ***Summary Tasks*** as shown in the Gantt chart with product features, and listing the tasks required to fulfill or complete the product features below the product features. Outlining the project plan produces a Work Breakdown Structure (WBS) that not only lists the tasks necessary to implement a product feature, but also shows which features are incorporated into each product plan. This hierarchical structure identifies where each task fits into the project plan as a whole (see pages 96-97).

Appellant has asserted that the Examiner has failed to identify a reference showing the tracking of each feature. The examiner disagrees and points to the Gantt chart as shown in Microsoft Project.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

JAMES A REAGAN
EXAMINER-3621
18 December 2003

Conferees
JOHN HAYES
JAMES TRAMMELL

JOHN W. HAYES
PRIMARY EXAMINER

COOLEY GODWARD LLP
ATTN PATENT GROUP
ONE FREEDOM SQUARE
11951 FREEDOM DRIVE
RESTON, VA 20190-5601